

ABSTRACT OF THE DISCLOSURE

A transmission line distance monitor/processor unit is provided in station equipment included in an optical subscriber system comprising the station equipment, a plurality of 5 subscriber units, a transmission line for transmitting trailing signals from the station equipment to the plurality of subscriber units and transmitting leading signals from the plurality of subscriber units to the station equipment, and a star coupler for branching trailing signals and combining the 10 leading signals. The transmission line distance monitor/processor unit sends a distance measuring control signal to each of the subscriber units, measures, based on a distance measuring signal returned from each of the subscriber units, the transmission line distance between the station 15 equipment and each of the subscriber units, and judges whether the transmission line distance is larger or smaller than a reference value. By virtue of the above construction, when the transmission line distance exceeds the reference value, the subscriber unit can be stopped to avoid an adverse effect, on 20 the subscriber unit under operation, such that the subscriber unit under operation is brought to an inoperative state.